# Improving Quality and Efficiency of Postpartum Hospital Education

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#### **ABSTRACT**

The purpose of this study was to investigate the implementation of an evidence-based, streamlined, education process (comprehensive education booklet, individualized education plan, and integration of education into the clinical pathway) and nurse education to improve the quality and efficiency of postpartum education during hospitalization. A one-group pretest–posttest design was used to measure the quality of discharge teaching for new mothers and efficiency of the education process for registered nurses before and after implementation of an intervention. Results indicated that a comprehensive educational booklet and enhanced documentation can improve efficiency in the patient education process for nurses.

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The new mother is expected to demonstrate knowledge and confidence in her ability to provide adequate care for herself and her newborn prior to discharge from the hospital (American Academy of Pediatrics & American College of Obstetrics and Gynecology [AAP & ACOG], 2007). During the hospital stay, information provided to new mothers about self-care and newborn care can allay concerns and boost confidence levels

The amount of education that is mandated by government and regulatory agencies and recommended by professional organizations for the postpartum mother may be overwhelming, and brief postpartum hospital stays leave insufficient time for nurses to address a new mother's learning needs effectively.

(Mantha, Davies, Moyer, & Crowe, 2008). The amount of education that is mandated by government and regulatory agencies and recommended by professional organizations for the postpartum mother may be overwhelming, and brief postpartum hospital stays leave insufficient time for nurses to address a new mother's learning needs effectively. Devastating outcomes for the infant and family may result when new mothers do not understand newborn care issues prior to discharge. Limited evidence is available that addresses the health outcomes of in-hospital education; however, a study by Weiss and Lokken (2009) found that poor quality discharge education was associated with more newborn emergency room or urgent care visits. Nurses need to know what strategies facilitate an efficient postpartum educational process in the hospital setting.

Our Level III regional perinatal center, which has 3,200 births per year, is part of a magnet-designated community teaching hospital. Maternity nurses expressed concerns about meeting educational needs of new mothers during their brief hospital stays. The nurses attributed their concerns to lack of time and the amount of information they were required to provide to prepare new mothers and their families to care for the newborn at home. Mothers also reported dissatisfaction with postpartum hospital education. The hospital uses the National Research Corporation Picker survey to determine patient satisfaction. The survey consistently reported poor results for the "physicians and nurses saying the same thing" on the mother-baby unit. Specifically, mothers reported frustration with inconsistent breastfeeding information and the need for more information about newborn care.

The routine education process at our hospital was to distribute a folder containing 35 informational handouts to mothers upon arrival in the mother—baby unit following childbirth. Breastfeeding mothers also received a second folder containing 10 handouts about breastfeeding. Mothers received additional handouts based on individual education needs. Mothers also were required to view videos about shaken baby syndrome, safe sleep, and car seat safety before leaving the hospital, and nurses assigned to mother—baby dyads provided mothers with one-on-one education based on a standard teaching checklist.

Many mothers received most of their education on the day of discharge, and no specific time was assigned to specific topics. Teaching resources were inefficiently located in 12 locations on the unit, and handouts were not always available. Furthermore, this process did not allow for systematic assessment and documentation of individual education needs, which resulted in mothers either not receiving information they wanted or receiving irrelevant information.

We designed a quality improvement project to determine whether implementing an evidence-based, streamlined, education process (creating a comprehensive education booklet, developing an individualized education plan, and integrating education into the clinical pathway) and nurse education would improve the quality and efficiency of postpartum education during hospitalization. The project plan was guided by three aims: (a) to improve the process of postpartum education, (b) to provide new mothers with individualized patient education, and (c) to improve the quality and efficiency of postpartum education.

# **REVIEW OF LITERATURE**

The challenges of providing postpartum and newborn education suggest the need for a streamlined, coordinated approach that will provide information that mothers find useful when transitioning from hospital to home. MEDLINE, Cumulative Index to Nursing and Allied Health Literature, Google Scholar, and The Cochrane Library databases were searched using the key words postpartum period, postnatal care, teaching, teaching materials, teaching methods, learning methods, and patient education to identify strategies for nurses to use to provide quality postpartum and newborn education for new mothers during hospitalization. The initial search resulted in 469 citations; 24 articles met inclusion criteria of hospital-based, nurse-provided postpartum education. Articles were also limited to those written in English, having a length of postpartum hospitalization current to the U.S. standard, and studies conducted in developed countries. Appraisal of the evidence identified 17 studies that were of sufficient quality to foster confidence as the underpinning for a change in practice; however, several of these studies were more than 10 years old. Researchers began to study mothers' unmet learning needs as the average length of hospital stays shortened. A summary of studies from 1963 to 2003 indicated that new mothers' learning needs may differ from standardized in-patient postpartum teaching (Bowman, 2005). The findings from this synthesis suggest that nurses should assess new mothers' learning needs and provide individualized education to effectively address new mothers' learning needs. Two studies published after 2003 that focused on different populations of new mothers also support Bowman's findings (Bowman & Ruchala, 2006; Sword & Watt, 2005).

Providing individualized patient education in a way that is easy to understand and memorable to new mothers is essential to enhance health literacy. Researchers have found that mothers value one-on-one verbal instruction (Dias et al., 2005), written information (Dias et al., 2005; Johnson, Edelman, & Jensen, 2003; McKellar, Pincombe, & Henderson, 2002, 2009), and time spent with a nurse (Hong, Callister, & Schwartz, 2003; Mantha et al.,

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2008; McKellar et al., 2002). Audiovisual materials were found to be less helpful (Dias et al., 2005). We did not find any studies that addressed the use of computer technology to educate postpartum mothers during hospitalization.

Written information that reinforces verbal instruction is supported as a method to enhance learning (AAP & ACOG, 2007). In Australia, researchers studied outcomes from the development of an education booklet for new parents based on suggestions from a focus group of postpartum women and a focus group of midwives (McKellar et al., 2002, 2009). Mothers reported that booklets are helpful (>90%) and contributed to knowledge of self-care and newborn care. In a randomized control trial of 109 mothers, researchers found that written contraceptive information provided to new mothers in the hospital helped them choose their methods of birth control (Johnson et al., 2003). Dias et al. (2005) combined several teaching methods when creating a hospital-based, parent education program about shaken baby syndrome. The study results demonstrated that written materials and conversation with the nurse were more frequently recalled (98% and 89%, respectively) than audiovisual material (23%). Well-designed written educational materials may be an inexpensive and effective intervention for improving postpartum women's knowledge and satisfaction with care.

Researchers found that mothers believe that having more individual time with a nurse during their postpartum hospitalization would better prepare them for caring for themselves and their newborn at home (Hong et al., 2003; Mantha et al., 2008; McKellar et al., 2002). Mothers found it beneficial when nurses remained with them during breastfeeding, offering guidance and answering questions in addition to using various teaching materials (Hong et al., 2003; Mantha et al., 2008). Interacting with new mothers by demonstrating how to care for self and their newborn during hospitalization may reinforce understanding of written information.

Researchers in only one study provided an anecdotal report of improved efficiency of a hospital-based postpartum education process (Daugherty & Moore, 1998). In this quality improvement project, the in-patient education process was enhanced by distributing a written educational booklet, creating individualized patient education plans, and integrating education throughout the hospital stay. As part of a continuous improvement effort, the

nurses also organized patient education supplies and written materials to make distribution of information more efficient.

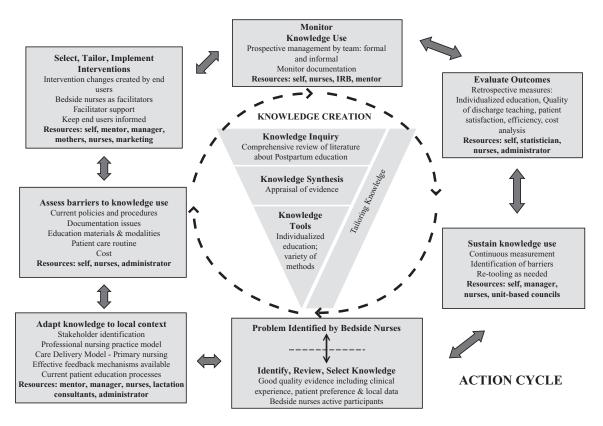
## TRANSLATIONAL FRAMEWORK

The Knowledge-to-Action framework developed by Graham et al. (2006) was used for this project and guided the translation process. Knowledge creation and an action cycle are two main components of the Knowledge-to-Action framework. Graham et al. used a funnel to represent the creation of knowledge as it progresses through three distinct levels: knowledge inquiry, knowledge synthesis, and knowledge tool, where it is refined and becomes useful to the end user. An action cycle with seven strategic planned activities encircles the funnel. The knowledge is implemented through the action cycle. Our quality improvement team individualized actions to each of the activities based on the context of the organization. For example, in the activity titled "assess barriers to knowledge use," the team identified the need to evaluate current policies and procedures, documentation issues, and educational materials and modalities (Figure 1). The Knowledge-to-Action process provided guidance for a thorough assessment of the evidence, thoughtful development of interventions, and well-planned implementation and measurement.

# STUDY DESIGN AND METHODS

A prospective, quasi-experimental pretest—posttest design was used to measure quality of discharge teaching for new mothers and efficiency of the education process for registered nurses before and after implementation of the education booklet and enhanced nursing documentation tools. Approval was obtained for this study through an expedited review by our hospital's institutional review board.

Postpartum teaching quality was measured using the Quality of Discharge Teaching Scale (QDTS) questionnaire (Weiss & Lokken, 2009). Author permission was obtained to use the questionnaire. The QDTS questionnaire consists of 19 items with three subscales: content needed, content received, and content delivery. The content subscales have seven paired items measuring the discharge-related information, content needed, and content received, as perceived by mothers. Each subscale score is determined by summing the item scores and calculating an overall mean. A subscale score for content difference is computed to identify the



**Figure 1.** Model of the Knowledge-to-Action process. Adapted with permission from "Lost in Knowledge Translation: Time for a Map?" by I. D. Graham, J. Logan, M. B. Harrison, S. E. Straus, J. Tetroe, W. Caswell, and N. Robinson, 2006, *Journal of Continuing Education in the Health Professions*, 26(1), 13–24. http://dx.doi.org/10.1002/chp.47

amount of information received in excess of mothers' perceived needs. A content difference subscale score is calculated by subtracting content received from content needed for each item, then summing each difference score and calculating an overall mean. The content delivery subscale is calculated by summing the 12 items measuring mothers' perception of nurses' skill in presenting discharge teaching and calculating an overall mean. Weiss and Lokken reported a Cronbach's alpha reliability coefficient for the postpartum sample as .85 for content received, .88 for content difference, and .84 for content delivery. Although a total QDTS questionnaire score can be calculated by summing content received and content delivery subscales, Weiss and Lokken recommend using the subscale scores in analyses because of differences in performance of the subscales in predictive relationships with readiness discharge and postdischarge outcomes (M. Weiss, personal communication, November 11, 2011).

In this study, a power analysis for proportions was calculated by estimating a 30% difference between groups with an alpha of .05 and power of .80.

A minimum of 45 mothers were needed in both the preintervention group and postintervention group.

We measured nurses' perception of efficiency of discharge teaching preintervention and postintervention using the questionnaire on factors influencing patient teaching (Honan, Krsnak, Petersen, & Torkelson, 1988). Honan et al. described registered nurses' beliefs about factors that affect their role in teaching patients. The questionnaire consists of demographic information, 20 questions with a Likert-type scale (strongly agree, agree, undecided, disagree, and strongly disagree), and eight questions with rank ordering. Honan et al. determined the questionnaire's content validity by a panel of experts. Their study was replicated, reporting a mean score for each question (Marcum, Ridenour, Shaff, Hammons, & Taylor, 2002). Reliability of the questionnaire was determined by similarity of results from replication studies; however, no Cronbach's alpha was published. Author permission was obtained to use the questionnaire for this study. There was insufficient information to complete a power analysis a priori. The questions with rank order response were not used in this study.

# Sample

A convenience sample of 100 mothers (50 preintervention and 50 postintervention) who gave birth at the hospital was asked to complete the QDTS questionnaire. The criteria to participate in this study included the following: being 18 years of age or older; able to speak and read English; having a singleton, full-term newborn; and discharged from the hospital with newborn within the standard length of stay (2 days for vaginal birth and 4 days for cesarean birth). Mothers were approached by a trained data collector within 4 hours prior to departure from the hospital, following written discharge by an obstetrician and pediatrician. Each mother received an enrollment letter detailing the study, and completion of the QDTS questionnaire was accepted as agreement to enroll. Women in the preintervention group were recruited between September 3, 2010, and September 28, 2010. Women in the intervention group were recruited 1 week following implementation of the intervention.

The study also included a convenience sample of registered nurses employed on the maternity unit who provided direct care to mother-infant dyads and who were not members of the quality improvement team. Nurses were required to attend a 90-min in-service about the educational intervention. Twelve in-services were provided between October 18, 2010, and October 26, 2010. A trained data collector provided registered nurses with an enrollment letter and sought their participation to complete a questionnaire during the first 20 min of each in-service. Nurses who completed the questionnaire were asked to complete the same questionnaire 4 weeks after implementation. Of the 52 registered nurses who met the inclusion criteria and attended the instructor-led classes, 45 completed the preintervention questionnaire and 31 completed the postintervention questionnaire. This study included only questionnaires that were completed preintervention and postintervention.

# Intervention

Our quality improvement team included stakeholders responsible for providing postpartum education: seven direct care nurses, two lactation consultants, a patient–family education coordinator, an outreach coordinator, a unit nurse manager, a clinical nurse specialist, a service line clinical director, and the coordinator of childbirth and family education. The coordinator for childbirth and family education was a vital member of the team to ensure consistent

information flowed throughout the continuum of care. The team reviewed the literature and concluded that creating a comprehensive education booklet, developing a mechanism to document individualized patient education plans, and integrating education throughout the length of each mother's hospital stay could improve the quality and efficiency of postpartum education at our hospital.

The team developed a 60-page postpartum education booklet composed of individual documents that test at a fifth to seventh grade reading level using the simple measure of gobbledygook (SMOG) readability calculator within Microsoft Word 2003. Color photographs enhance the written material and provide pictorial demonstrations. The booklet is intended to be a practical resource to promote a dialogue between the nurse and new mother about the mother's learning needs. The table of contents is designed as a checklist of topics that informs the mother of content that is mandatory for nurses to teach them as well as content that she may wish to have been taught before leaving the hospital. Information that the mother believes she is competent in is assessed by nurses through observation or questioning. This process supports the development of an individualized education plan. The quality improvement team eliminated the standard generic teaching checklist in favor of integrating educational topics into the vaginal birth and cesarean surgery pathways to encourage documentation of the mothers' learning needs and teaching provided. The team also identified information that could be taught each shift throughout the mothers' hospital stay.

An important aspect of the project was to ensure that nurses understood how to use the booklet to provide individualized education. The mandatory in-service included a review of information available in the booklet, a demonstration of how to use the booklet to assess mothers' learning needs, ways to provide interactive education using the new booklet, and procedure for documentation of education on the clinical pathways.

#### **Analysis**

We used an independent samples t test to examine differences in mothers' perceived need for education, education received from nurses, and quality of education provided by nurses based on the QDTS questionnaire in both the preintervention group and postintervention group. Statistical significance is recognized as p < .05. We used paired samples

t tests to assess differences in nurses' perception of factors influencing their teaching of patients preintervention and postintervention. Because the sample size was small, statistical significance was recognized as p < .01. Analysis was completed using SPSS version 17.0.

#### RESULTS

# Quality of Discharge Teaching Scale

The mothers participating in the study had a mean age of 28 years old. Most of the participants were White (83%), were high school graduates or higher (96%), had experienced vaginal births (63%), chose to breastfeed their newborns (68%), had a previous child

(59%), and attended a prenatal class during a pregnancy (60%). Demographic characteristics of the two groups are presented in Table 1. Chi-square analysis determined no significant difference between groups.

An independent samples t test was calculated to examine differences in educational preparation for discharge related to mothers' perceived need for information, information received from nurses, and quality of teaching provided by nurses based on scores of the QDTS questionnaire. There was no significant difference for the subscale scores for content needed (t[98] = -1.216, p > .05) and content received (t[98] = -1.855, p > .05) between groups (Table 2). A positive mean score

TABLE 1

Demographic Characteristics of New Mothers

Age (years)	Group as Whole Postpartum, $n = 100$		Preintervention $n = 50$		Postintervention $n = 50$										
	M (SD) 27.77 (5.33) Number	Range 18–41 %	M (SD) 28.16 (4.95) Number	Range 19–41 %	M (SD) 27.38 (5.71) Number	Range 18–38 %	- - р								
								Race							.106
								White	83	83	43	87.5	40	81.6	
Black	12	12	3	6.1	9	18.4									
Multi <sup>a</sup>	1	1	1	2.0	0	0.0									
Other	2	2	2	4.1	0	0.0									
Hispanic ethnicity Education	6	6	4	9.8	2	4.7	.364 .197								
No diploma (9th-12th)	4	4	0	0.0	4	8.0									
High school graduate or equivalency (GED)	31	31	17	34.0	14	28.0									
2 years education beyond high school	24	24	11	22.0	13	26.0									
4 or more years education beyond high school	41	41	22	44.0	19	38.0									
Birth method							.534								
Vaginal	63	63	30	60.0	33	66.0									
Cesarean	37	37	20	40.0	17	34.0									
Feeding method							.385								
Breast	51	51	29	64.4	16	32.0									
Bottle	21	21	9	20.0	12	27.3									
Both	17	17	7	15.6	10	22.7									
Attended prenatal classes							.380								
During this pregnancy	29	29	13	26.0	16	32.0									
With previous pregnancy	29	29	17	34.0	12	24.0									
Never	39	39	19	38.0	20	40.0									
Multi <sup>b</sup>	2	2	0	0.0	2	4.0									
Number of children							.542								
No live children	41	41	19	38.0	22	44.0									
Previous live children	59	59	31	62.0	28	56.0									

 $\it Note. \ GED = general \ education \ development.$ 

<sup>a</sup>Race: Multi includes White and Black; Other is unknown.

<sup>&</sup>lt;sup>b</sup>Attended prenatal classes: Multi includes both with previous pregnancy and during this pregnancy.

TABLE 2

Summary of New Mothers' Scores on the Quality of Discharge Teaching Scale Questionnaire

	Preinterve	ntion $n = 50$	Postinterv	t test	
Measure	M (SD)	Range	M (SD)	Range	p
Content needed	4.06 (1.93)	0.64–7.71	4.52 (1.82)	1.20-8.75	.227
Content received	7.01 (1.94)	2.75-9.88	7.75 (2.05)	3.38-10.00	.067
Content difference	2.47 (2.43)	-2.29-7.86	2.91 (2.81)	-1.57-10.00	.411
Content delivery	8.77 (1.23) <sup>a</sup>	5.17-10.00	8.61 (1.54)	3.33-10.00	.580

Note. Content difference (content received — content needed).

on the content difference subscale of the ODTS questionnaire for both the preintervention group (M = 2.47, SD = 2.43) and the postintervention group (M = 2.91, SD = 2.81) indicated that most mothers felt that they received more information than they needed. There was no significant difference for the subscale score for content difference (t[98] = -.826, p > .05). Most mothers received information they needed (preintervention = 88% and postintervention = 86%). Thirteen mothers (six preintervention and seven postintervention) reported receiving less teaching than they believed they needed. The topic of information mothers felt they did not receive varied among the mothers. For example, some mothers needed more information about postpartum emotional adjustment and others needed more information about baby care skills. No significant difference was found (t[97] = .555,p > .05). Mothers in both groups reported that they received good quality education (Table 2).

# Nurses' Perception of Efficiency

Most of the registered nurses in this study had a bachelor's degree (67.6%), had less than 6 years of experience in the obstetric specialty (45.2%), had a mean age of 40 years old, and worked full time (61.3%). The demographic characteristics for the registered nurses are presented in Table 3. No differences were found in the demographic characteristics of the registered nurses who did not complete the postintervention questionnaire.

Paired samples t test was calculated to compare the mean scores for each question preintervention and postintervention (Table 4). Several items in the questionnaire were focused on the project aim to improve efficiency of postpartum education. Nurses agreed that it would be helpful for patient education if patient teaching materials were kept in one central area on the unit both preintervention (M = 1.53, SD = .681) and postintervention (M = 1.47, SD = .681).

A significant increase from preintervention to postintervention was found for the availability of adequate patient teaching materials for nurses to use when educating patients (t[30] = 6.400, p < .01), and patient teaching forms provided guidance for (t[30] = 5.541, p < .01) and documentation of patient education (t[30] = 6.167, p < .01).

Although there was no significant difference in nurses' response to the statement "I often do formal patient teaching that I do not document," there was a significant improvement in documentation of informal patient teaching (t[30] = -3.236, p < .01). Nurses' perception of adequate time to teach patients (t[30] = 2.988, p < .01) and time for patients to be

TABLE 3 Demographic Characteristics of Registered Nurses (n = 31)

nge
-64

*Note.* PRN = as needed

 $^{a}n = 29. ^{b}n = 30.$ 

 $<sup>^{</sup>a}n = 49$ 

TABLE 4

Registered Nurses' Perceptions About Efficiency of Patient Education Process (n = 31)

	Pretest	Posttest	t test
	M (SD)	M (SD)	р
It would be helpful for patient teaching if patient teaching materials were kept in one central area on each unit.	1.53 (.681) <sup>a</sup>	1.47 (.681)	.690
There are adequate patient teaching materials available for nurses to use when doing patient teaching.	2.74 (.965)	1.81 (.477)	.000
The patient teaching forms provide me with enough guidance to teach a patient about a specific topic.	2.97 (1.110)	1.71 (.588)	.000
The patient teaching flow sheets provide adequate guidance for documentation of patient teaching.	2.81 (1.046)	1.61 (.558)	.000
I often do formal patient teaching that I do not document.	3.68 (1.045)	3.81 (.873)	.502
I often do informal patient teaching that I do not document.	2.06 (.998)	2.68 (1.194)	.003
Lack of time is a factor why documentation of patient teaching is not done.	2.21 (1.013)b	2.24 (.786) <sup>b</sup>	.869
There is adequate time to do patient teaching.	3.65 (.915)	3.13 (1.024)	.006
My patients are being adequately taught before discharge.	2.52 (.785) <sup>b</sup>	2.07 (.651) <sup>b</sup>	.001

Note. Strongly agree = 1, agree = 2, undecided = 3, disagree = 4, strongly disagree = 5.

taught adequately before discharge (t[28] = 3.520, p < .01) significantly increased from preintervention to postintervention.

## **DISCUSSION**

Nurses reported that efficiency of providing patient education was enhanced. The project team enhanced efficiency in the patient teaching process by reducing the number (76.45% reduction) and location (12 to 3 locations) of handouts by replacing them with one comprehensive discharge education booklet for new mothers. The nurses completing the study's questionnaire strongly agreed that keeping patient teaching materials in a central location was helpful for patient education. This finding was supported in studies using the same questionnaire (Honan et al., 1988; Marcum et al., 2002). Nurses viewed the comprehensive discharge education booklet as a helpful tool when teaching new mothers about a specific topic.

Creating specificity in the patient teaching process by integrating educational topics into the clinical pathways seemed to provide guidance to nurses for documentation of patient education. Improved documentation may have influenced nurses' perceptions that patients were receiving ample information, whereas readily available resources and guided documentation may have provided more time for teaching patients.

Most new mothers in this study reported receiving more information than they needed. Weiss and Lokken (2009) reported similar findings when using the QDTS questionnaire. More than half of the mothers in this study had experience with previous children; therefore, they had more knowledge and confidence in their ability to care for themselves and their newborns. Nurses are required by regulatory agencies to review many topics with new mothers during hospitalization, regardless of mothers' previous experiences and knowledge. Among the mothers who felt they received less information than needed, specific content needs varied. Bowman (2005) suggested that qualitative studies may be beneficial to provide nurses with knowledge about the types of information new mothers consider important.

Mothers' overall perception of the quality of teaching was high in both preintervention and postintervention; however, findings did not demonstrate an improvement in quality of teaching. Weiss and Lokken (2009) found that new mothers' ability to care for self, newborn, and family following discharge increased when they received more information than they perceived they needed and quality of discharge teaching was high.

# **LIMITATIONS**

The outcomes reported by new mothers in this quality improvement project are limited by the small sample size. The effect size for the content delivery subscale was smaller than anticipated; therefore, a much larger sample size is needed. Mothers in this study were well educated, and more than half of

 $<sup>^{</sup>a}n = 30. ^{b}n = 29. ^{a}$ 

Providing education in various ways, including one-on-one interaction reinforced by written materials, may be an effective approach for meeting postpartum women's knowledge needs.

the mothers had previous childbirth experience. Replication of this study with first-time mothers and women having less formal education may provide a more reliable measure of quality of postpartum education. In addition, assessment of breastfeeding education and past breastfeeding experience may have provided more insight into mothers' perception of quality of breastfeeding education.

The sample size for registered nurses was also small. The nurses who chose to participate in the study may have been more supportive of the change. The perceptions of registered nurses who chose not to participate could have affected the findings; however, concrete changes were made.

#### CLINICAL NURSING IMPLICATIONS

Providing efficient and effective in-patient postpartum education is important to nurses. Centralizing patient education materials creates efficiency for nurses when providing patient teaching. Incorporating those educational materials into a comprehensive teaching guide can provide an easy way for nurses to foster dialogue with new mothers about their learning needs. Integrating patient teaching into patient clinical pathways provides guidance for patient teaching. It also improves communication about teaching from nurse to nurse as well as the important work of documentation.

High-quality postpartum education during hospitalization is vital to new mothers' ability to care for self, newborn, and family. A multifaceted educational approach may best meet the learning needs of new mothers. Providing education in various ways, including one-on-one interaction reinforced by written materials, may be an effective approach for meeting postpartum women's knowledge needs.

In addition, mothers want to receive consistent information from their health-care providers. A comprehensive education booklet may promote consistent education from nurse to nurse. Although the focus of our quality improvement project was on postpartum education during hospitalization, perinatal educators and postpartum nurses should collaborate to develop educational materials that provide consistent information throughout the continuum of care.

Every parent needs to have resources regarding postpartum and newborn care readily available, and new mothers value having comprehensive printed information in one booklet. A booklet is a portable medium that is at the new mother's fingertips when she needs it most—during hospitalization, early postpartum, and the newborn stage.

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